S24-17 Consumers' acceptability of fortified gari, a cassava product in Benin

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Gari is the most popular staple food made from cassava in Benin and other African countries. It is consumed dry, or diluted into tap water added with sugar, coconut, peanuts/cashew nuts, or as a cooked paste accompanied with a sauce. There is a large variability of traditional gari products in Benin, depending on processes and areas. More recently, a fortified gari (added with palm oil or/and soybean) resulting from research and endogenous innovative actions was developed. Up to now, the consumption of those new gari types is not still spread to all the regions in Benin. Consumers' perception of gari, particularly fortified gari, could be key information required to develop strategies for marketing it.

In this study, consumer acceptance of fortified gari compared to traditional ones was investigated using hedonic tests (overall liking with a 9-point scale, and a JAR -Just-About-Right- Scale for some particular sensory descriptors) and also Check-All-That-Apply (CATA) method. Five gari samples, three traditional and two fortified ones, were presented to 122 consumers. Their overall mean scores ranged from 3.0 to 7.1. Palm oil gari and soya gari were well accepted by the consumers with respective mean scores of 7.1 and 6.7, comparable to the most liked traditional one (Ayahoe gari, mean score of 6.7). Cluster analysis revealed three distinct patterns of consumers. Light colour, crusty, dry, small particle size, homogeneous and sweet taste were the main drivers of liking. In addition, penalty analysis showed that acidic taste and dark colour were responsible for the highest penalization on overall liking by the consumers. Relationships between CATA descriptors and some physico-chemical characteristics of gari samples were established. Significant correlations were found between acidic taste and pH (r^2=0.84) and between crusty and dry matter content (r^2=0.95). The lower production and consumption of these new gari types could not be explained by an overall disliking by Beninese consumers.